

Supplementary Table 1. (A) Preoperative baseline characteristics of patients with early and late recurrence, **(B)** Intraoperative and postoperative characteristics of patients with early and late recurrence, **(C)** Characteristics of patients with early and late recurrence at the time of recurrence.

(A) Preoperative baseline characteristics of patients with early and late recurrence

Variables	Early Recurrence (N=110)	Late Recurrence (N=47)	P Value
Sex (year)			0.107
Male	84 (76.4)	30 (63.8)	
Female	26 (23.6)	17 (36.2)	
Age	67.00 (60.00~75.00)	63.00 (60.00~68.00)	0.095
FOBT			0.578
Positive	45 (44.6)	26 (60.5)	
Negative	56 (55.4)	17 (39.5)	
BMI (kg/m ²)	22.4 (19.5~23.8)	21.00 (19.8~23.2)	0.385
HB (g/l)	121.5 (101~138.5)	130 (106~144)	0.052
RBC (×10 ¹² /l)	3.97 ± 0.68	4.25 ± 0.67	0.020*
TP (g/l)	63.04 ± 7.61	64.86 ± 6.70	0.158
ALB (g/l)	37.18 ± 5.06	39.15 ± 3.94	0.019*
GLB (g/l)	25.60 (22.80~27.82)	25.40 (23.70~27.90)	0.924
A/G	1.46 ± 0.24	1.54 ± 0.19	0.046*
NEUT (×10 ⁹ /l)	3.13 (2.55~3.96)	2.58 (2.10~3.80)	0.023*
LY (×10 ⁹ /l)	1.34 (1.08~1.69)	1.39 (1.14~1.73)	0.844

MONO (×10⁹/l)	0.43(0.36~0.54)	0.37 (0.30~0.46)	0.014*
CRP (mg/l)	1.60 (0.68~5.52)	1.02 (0.51~3.15)	0.128
PLT (×10⁹/l)	203.50 (160.00 ~ 259.75)	188.00 (148.00 ~ 246.00)	0.214
NLR	2.21 (1.69~3.13)	1.79 (1.46~2.66)	0.027*
LCR	0.80 (0.24~2.34)	1.40 (0.59~2.53)	0.113
PLR	151.46 (108.33~208.47)	124.24 (101.43~182.06)	0.125
LMR	3.24 (2.46 ~ 4.20)	3.53 (2.78 ~ 4.75)	0.073

FOBT, fecal occult blood test; BMI, body mass index; HB, hemoglobin; RBC: red blood cell; TP: total protein; ALB, albumin; GLB, globulin; A/G, albumin-globulin ratio; NEUT, neutrophil; LY, Lymphocyte; MONO, monocyte; CRP, C-reactive protein; PLT, platelet; NLR, neutrophil-lymphocyte ratio; LCR, lymphocyte-C-reactive protein ratio; PLR, platelet-lymphocyte ratio; LMR, lymphocyte-monocyte ratio.

* $P<0.05$

(B) Intraoperative and postoperative characteristics of patients with early and late recurrence

Variables	Early Recurrence (N=110)	Late Recurrence (N=47)	<i>P</i> Value
Resection range			0.534
Total	41 (37.3)	20 (42.6)	
Subtotal	69 (62.7)	27 (57.4)	
Surgical method			0.365
Billroth I	9 (8.2)	7 (14.9)	
Billroth II	59 (53.6)	21 (44.7)	
Roux-en-Y	42 (38.2)	19 (40.4)	
Surgical procedure			0.561
Open	50 (45.5)	19 (40.4)	
Laparoscopic	60 (54.5)	28 (59.6)	
Operative time (min)	231.5 (193.75~270.00)	220 (185.00~251.00)	0.242
Positive lymph node ratio	0.30 (0.13~0.60)	0.20 (0.08~0.43)	0.023*
Differentiation			0.079
Well	0 (0.00)	2 (4.5)	
Moderate	19(17.4)	8 (18.2)	
Poor	90 (82.6)	34 (77.3)	
Tumor size (cm)	5.5 (4.0~7.47)	4.5 (3.0~6.8)	0.061
Tumor location			0.812
High	13 (12.3)	6 (14)	

Middle	40 (37.7)	18 (41.9)	
Low	53 (50)	19 (44.2)	
Borrmann classification			0.177
I	5 (4.6)	3 (6.7)	
II	3 (3.95)	7 (8.97)	
III	70 (64.2)	31 (68.9)	
IV	29 (26.6)	6 (13.3)	
pTNM			0.006*
II	20 (18.2)	17 (39.5)	
III	90(81.8)	26 (60.5)	
Time to first flatus (d)	3.00 (3.00~4.00)	3.00 (3.00-4.00)	0.021*
Postoperative chemotherapy			0.151
Yes	85 (77.3)	41 (87.2)	
No	25 (22.7)	6 (12.8)	
Clavein Dindo classification			0.143
I	50 (45.5)	29 (61.7)	
II	57 (51.8)	16 (34.0)	
III	2 (1.8)	2 (4.3)	
IV	1 (0.9)	0 (0)	
Recurrence pattern			0.385
Local	9 (8.2)	4 (8.5)	
Abdominal	44 (40.0)	17 (36.2)	

Distant	41 (37.3)	23 (48.9)
Multiple	16 (14.5)	3 (6.4)

TNM, tumor, node, metastasis; 8th edition of AJCC (American Joint Committee on Cancer) classification;

* $P<0.05$

(C) Characteristics of patients with early and late recurrence at the time of recurrence

Variables	Early Recurrence (N=110)	Late Recurrence (N=47)	P Value
FOBT			0.502
Positive	23 (23.2)	12 (28.6)	
Negative	76 (76.8)	30 (71.4)	
BMI (kg/m ²)	19.38 (17.99~ 21.45)	19.22 (17.98 ~ 21.02)	0.566
HB (g/l)	109 (99 ~ 121)	113 (104 ~ 125)	0.169
RBC (×10 ¹² /l)	3.55 ± 0.55	3.79 ± 0.60	0.016*
TP (g/l)	61.04 ± 8.17	62.73 ± 6.97	0.218
ALB (g/l)	35.3 (30.85 ~ 38.27)	37 (34.2 ~ 40.1)	0.075
GLB (g/l)	25.9 (22.67~28.65)	26 (24.4~29.5)	0.378
A/G	1.34 ± 0.32	1.38 ± 0.27	0.558
NEUT (×10 ⁹ /l)	2.85 (1.91~4.74)	2.71 (2.07~3.87)	0.710
LY (×10 ⁹ /l)	1.00 (0.80~1.39)	1.03 (0.75~1.47)	0.853
MONO (×10 ⁹ /l)	0.41 (0.31~0.54)	0.35 (0.28~0.44)	0.032*
CRP (mg/l)	5.12(1.31 ~ 24.33)	1.97 (0.47~14.99)	0.025*
PLT (×10 ⁹ /l)	163.5 (126.5~219.25)	180 (117~227)	0.552
NLR	2.47 (1.52~5.42)	2.82 (1.65~4.03)	0.921
LCR	0.21 (0.03~1.07)	0.42 (0.09~2.54)	0.037*
PLR	155.19 (103.90~212.86)	162.36 (117.88~226.08)	0.593

LMR	2.64 (1.72~3.79)	2.90 (2.12~3.67)	0.247
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